

Credit: Credit, Debit, & Cash

04/17/17

What's in your wallet?

| | | |
|---------------|------------|------------------|
| ID | Cash | CCAP card |
| License | Photos | Membership cards |
| Credit card | Receipts | Library card |
| Business card | Coupons | Store cards |
| Medicaid card | Debit Card | Gym card |
| Emergency #s | EBT card | |

You're buying concert tickets online.

What in your wallet will you use to pay for them?

| | |
|-------------|--------|
| Credit card | coupon |
| Debit card | |
| Gift card | |

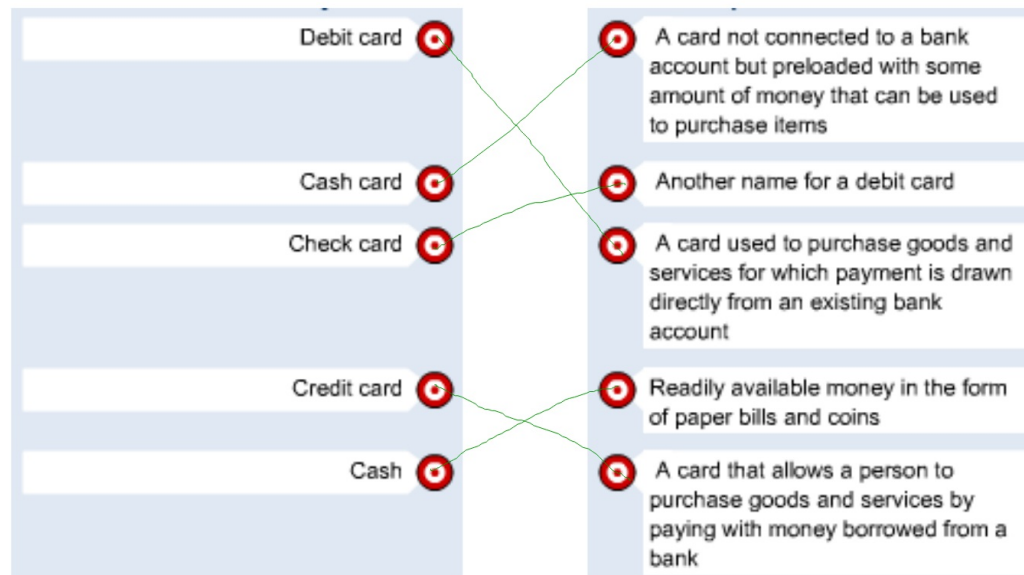
Credit: Credit, Debit, & Cash

IWBAT differentiate between debit and credit cards and cash, study the advantages and disadvantages of using credit, and learn basic credit card terminology.

I will do this via capturing notes in Cornell notes format, whole class discussions to introduce and clarify key concepts, and completing practice problems collaboratively with teacher support.

Credit: Credit, Debit, & Cash

What do we know already?



Credit: Credit, Debit, & Cash

Paper or Plastic?

| Credit | Debit | Cash |
|--|---|---|
| <ul style="list-style-type: none"> - you owe it back plus interest - people can get your information for fraud - super easy to overspend - Debt - Buy online - builds credit score - no Bank acct - no ATM for purchase - might not be accepted - Make larger purchases - pay over time | <ul style="list-style-type: none"> - Can Overdraft (fee) then can incurr service fees - people can get your info for fraud - Super easy to overspend - need a bank account - fees (incl. ATM) - might have minimum balance - buy online - no ATM for purchase - might not be accepted - Don't pay interest - could earn interest | <ul style="list-style-type: none"> - You might not have the correct bills on you - May end up carrying a lot of change - Can't buy online - Can easily be used if stolen - Can be torn - have to find ATM/Bank - ATM fees - no bank acct - no debt - no service fees - harder to use for fraud - Can't overspend - appreciated - widely accepted - Anonymous ^{pay} interest |

Credit: Credit, Debit, & Cash

interest - Payment of an additional amount of money based on time and a percentage of the amount borrowed

APR - Annual Percentage Rate
the rate of interest annually on your account

minimum monthly payment -
the minimum amount you can pay each month

billing cycle - the amount of time between payments (usually monthly)

grace period - the amount of time you have to pay before they charge interest

finance charge - an additional fee for borrowing money
can be interest or a flat fee

IWBAT understand how credit cards work and learn the language of credit, compute the APR and effective rate of a given credit card and understand how minimum payments are calculated.

Credit: Credit, Debit, & Cash

According to the federal **Truth in Lending Act**, a bank is required to notify you of all charges associated with the credit card before you sign up.

Below is an example image of a Schumer box.

| IMPORTANT CREDIT DISCLOSURES | |
|--|--|
| ANNUAL PERCENTAGE RATE (APR) | 12.9% |
| Other APRs | Late Payment APR 24.9%* (see explanation below) |
| Minimum FINANCE CHARGE | \$1.00 |
| Method of Computing the Balance | Average Daily Balance (Including New Purchases) |
| Grace Period for Repayment of the Balance | Not less than 25 days |
| Annual Fee | None |
| A Late Payment Fee of \$15.00 for balances less than \$50.00; \$25.00 for balances of \$50.00 but less than \$100.00; \$29.00 for balances of \$100.00 but less than \$1,000.00; and \$35.00 for balances \$1,000.00 and above per Account Type. You need not accept the credit card or pay any fee unless you use the card or have already used the Account. To find out about changes in the information in the table above, write us at P.O. Box 51, Mason, Oregon 40450. | |

*If at any time you fail to pay the Minimum Payment Due by the Payment Due Date for two consecutive billing cycles or twice in any six month period, the APR will increase to 24.9%.

IWBAT understand how credit cards work and learn the language of credit, compute the APR and effective rate of a given credit card and understand how minimum payments are calculated.

Credit: Calculating Credit Card Interest

Explain these terms in your own words.

interest - payment of an additional amount of money based on time and percentage of the amount borrowed

APR - Annual percentage rate

minimum monthly payment - The least amount of money gained per month.

finance charge -
An additional fee for borrowing money
can be interest or flat fee

Credit: Calculating Credit Card Interest

IWBAT define credit and interest, learn how credit card companies compute interest, calculate finance charges using different interest rates, and describe the rights and responsibilities of buyers and sellers under consumer protection laws.

I will do this via capturing notes in Cornell notes format, whole class discussions to introduce and clarify key concepts, and completing practice problems collaboratively with teacher support.

Credit: Calculating Credit Card Interest

Billing cycle - a month-long period during which interest is calculated and then billed

$$\text{periodic interest rate} = \frac{\text{APR}}{365} * \# \text{ of days in billing cycle}$$

grace period - *amount of time you have to pay what you borrowed before they charge interest*

Revolving credit - *money you can borrow, pay back and then borrow the same money again*

IWBAT understand how credit cards work and learn the language of credit, compute the APR and effective rate of a given credit card and understand how minimum payments are calculated.

Credit: Calculating Credit Card Interest

Compound interest

$$fv = P \left(1 + \frac{r}{n} \right)^t$$

$$n = \begin{cases} \text{daily} = 365 \\ \text{monthly} = \frac{365}{30} \approx 12.167 \end{cases}$$

$$r = \frac{\text{APR}\%}{100}$$

t = number of compounding periods

Effective interest rate [I(eff) or APY]

$$\text{APY} = \left(1 + \frac{r}{n} \right)^n - 1$$

IWBAT understand how credit cards work and learn the language of credit, compute the APR and effective rate of a given credit card and understand how minimum payments are calculated.

Credit: Calculating Credit Card Interest

Effective interest rate:

$$APY = \left(1 + \frac{r}{n}\right)^n - 1$$

$$\left(1 + \frac{0.129}{365}\right)^{365} - 1$$

$$= 0.1377 \quad 13.77\%$$

IMPORTANT CREDIT DISCLOSURES

| | |
|---|---|
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A Late Payment Fee of \$15.00 for balances less than \$50.00; \$25.00 for balances of \$50.00 but less than \$100.00; \$29.00 for balances of \$100.00 but less than \$1,000.00; and \$35.00 for balances \$1,000.00 and above per Account Type. You need not accept the credit card or pay any fee unless you use the card or have already used the Account. To find out about changes in the information in the table above, write us at P.O. Box 51, Mason, Oregon 40450.

†If at any time you fail to pay the Minimum Payment Due by the Payment Due Date for two consecutive billing cycles or twice in any six month period, the APR will increase to 24.9%.

Periodic interest rate:

$$\frac{APR}{365} \cdot \text{#days in billing cycle}$$

$$\frac{0.129}{365} \cdot 30 = 0.0106$$

$$1.06\%$$

IWBAT explore the average daily balance, previous balance, and adjusted balance methods and compare the various methods credit card companies use to calculate interest.

Credit: Calculating Credit Card Interest

average daily balance method

The average daily balance is calculated by adding each day's balance and dividing that total by the number of days in the billing cycle. This is multiplied by the periodic interest rate.

previous balance method

Interest is calculated based on the outstanding balance at the end of the previous billing period. *New charges* in the current billing period are *not* part of the interest calculation. This is multiplied by the periodic interest rate.

adjusted balance method

Interest is added based on the account balance remaining after applying all payments and credits during the billing period. *New charges* in the current billing period are *not* part of the interest calculation. This is multiplied by the periodic interest rate.

IWBAT explore the average daily balance, previous balance, and adjusted balance methods and compare the various methods credit card companies use to calculate interest.

Credit: Calculating Credit Card Interest

One example:

| | Average daily balance | Adjusted balance | Previous balance |
|---|--------------------------|--------------------------|--------------------------|
| Monthly | 1.5% | 1.5% | 1.5% |
| Rates | 18% | 18% | 18% |
| Previous balance | \$400 | \$400 | \$400 |
| Payments | \$300 | \$300 | \$300 |
| On 15th day (new balance = \$100) | | | |
| Average daily balance | \$250* | N/A | N/A |
| Finance charge | \$3.75 (1.5% • \$250) | \$1.50 (1.5% • \$100) | \$6.00 (1.5% • \$400) |
| * To figure average daily balance: (\$400 × 15 days) + (\$100 × 15 days) = \$250 × 30 days | | | |

If you pay off your balance every month, only the ADB method will result in a finance charge. This is one reason why it is the most commonly used method by credit card companies.

IWBAT explore the average daily balance, previous balance, and adjusted balance methods and compare the various methods credit card companies use to calculate interest.

Credit: Calculating Credit Card Interest

The opening balance of one of Herb's 30-day billing cycles for his credit card was \$1220, and it remained that amount for the first 10 days of his billing cycle. He then made a purchase for \$470, so his balance jumped to \$1690, and it remained that amount for the next 10 days. Herb then made a payment of \$350, so his balance for the last 10 days of the billing cycle was \$1340. The APR of Herb's credit card is 33%.

- What was Herb's average balance for the month?

$$\begin{aligned} \$1220 \times 10 &= 12200 \\ \$1690 \times 10 &= 16900 \\ \$1340 \times 10 &= 13400 \\ \hline &42500 \\ &30 \\ \hline &1416.67 \end{aligned}$$
- What is his periodic interest rate?

$$\frac{.33}{365} \times 30 = 0.0271$$

$$2.71\%$$
- If Herb's credit card uses the average daily balance method, how much was Herb charged in interest for the billing cycle?

$$\$1416.67 \times 0.0271 = \$38.39$$
- If Herb's credit card uses the previous balance method, how much was Herb charged in interest for the billing cycle?

$$\$1220 \times 0.0271 = \$33.06$$
- If Herb's credit card uses the adjusted balance method, how much was Herb charged in interest for the billing cycle?

$$(\$1220 - 350) \times 0.0271 = \$23.58$$

IWBAT explore the average daily balance, previous balance, and adjusted balance methods and compare the various methods credit card companies use to calculate interest.

Credit: Calculating Credit Card Interest

Fair Credit Billing Act

- Unauthorized purchases, charges for unreceived items, or payments not credited to your account must be challenged within 60 days of receiving your bill.
- Credit card companies must investigate and either correct the mistake or explain why there was no error within two billing cycles.
- The disputed amount cannot be billed and you are not required to make a payment on it.
- If the disputed amount is not an error, it will become due as a normal charge.
- Your credit history *will* be protected during the dispute process.
- Creditors must provide a statement of customer rights when the account is opened and at least twice every year thereafter.

IWBAT explore the average daily balance, previous balance, and adjusted balance methods and compare the various methods credit card companies use to calculate interest.

Credit: Calculating Credit Card Interest

Other laws which protect you as a consumer:

- Prompt crediting of payments: Payments must be credited to your account the day of receipt by the creditor.
- Refunds of credit balances: Credit balances must be refunded within seven days after the creditor receives a written request.
- Unauthorized charges: You are not responsible for charges made within two days after a card is reported lost. If you report the credit card loss more than two days later, you are liable for no more than \$50.
- Disputes: You can withhold payment for credit card purchases of problematic merchandise or services if you have made good faith efforts to resolve the issue with the seller.

IWBAT explore the average daily balance, previous balance, and adjusted balance methods and compare the various methods credit card companies use to calculate interest.

Credit: Calculating Credit Card Interest

<https://www.consumer.ftc.gov/>

Credit Card Interest Practice Problems

IWBAT explore the average daily balance, previous balance, and adjusted balance methods and compare the various methods credit card companies use to calculate interest.

Credit: Tracking Payments & Purchases

Explain the differences between average daily balance, previous balance, and adjusted balance methods of calculating credit card interest.

ADB Counts everything (purchases + payments)

PB Counts neither purchases nor payments

AdjB Counts payments but not purchases

<http://mikemelosh.wikispaces.com/Class+Notes>

Credit: Tracking Payments & Purchases

IWBAT examine the costs and benefits of various methods of payment, analyze the relationship among the finance charges, the principal of the loan, and the loan repayment period, calculate how much you will end up paying if you only make minimum payments, and calculate unpaid balances after series of payments, finance charges, and new purchases.

I will do this via capturing notes in Cornell notes format, whole class discussions to introduce and clarify key concepts, and completing practice problems collaboratively with teacher support.

Credit: Tracking Payments & Purchases

Calculate how much you will end up paying if you only make minimum payments.

You made a New Year's resolution to get in shape so you purchase a tread climber on sale for \$1200. You put it on your credit card. How long will it take for you to pay it off using the minimum payment of \$10 or 2% of the balance, whichever is higher?

$$\$1200(.02) = \$24$$

$$\frac{\$1200}{\$24} = 50 \text{ pmt}$$

IWBAT make a table that shows the effects of making payments and additional purchases on the balance and explore various scenarios to pay off a credit card to see which is most beneficial.

Credit: Tracking Payments & Purchases

How long will it take if you pay \$24/mo?

50 mo (4yr 2mo)

Your card has an APR of 12%. How long will it now take you to pay off the purchase?

$$P.I.R. \quad \frac{.12}{365} \times 30 = 0.0098$$

$$\$1200(.0098) = \$11.76$$

$$\$1211.76 - 24 = \$1187.76$$

$$\$1187.76(.0098) = \$11.84$$

<http://www.bankrate.com/calculators/managing-debt/minimum-payment-calculator.aspx>

IWBAT make a table that shows the effects of making payments and additional purchases on the balance and explore various scenarios to pay off a credit card to see which is most beneficial.

Credit: Tracking Payments & Purchases

It will take you 66 months to be rid of your debt. In that time, you will pay \$443.00 in interest.

If you paid the minimum payment every month, it would take you 117 months, to pay off your debt and you would pay \$744.97.

| Month | Fixed Payment | Interest Paid | Principal Paid | Remaining Balance |
|-------|---------------|---------------|----------------|-------------------|
| 1 | \$25.00 | \$12.00 | \$13.00 | \$1187.00 |
| 2 | \$25.00 | \$11.87 | \$13.13 | \$1173.87 |
| 3 | \$25.00 | \$11.74 | \$13.26 | \$1160.61 |
| 4 | \$25.00 | \$11.61 | \$13.39 | \$1147.21 |
| 5 | \$25.00 | \$11.47 | \$13.53 | \$1133.69 |
| 6 | \$25.00 | \$11.34 | \$13.66 | \$1120.02 |
| 7 | \$25.00 | \$11.20 | \$13.80 | \$1106.22 |
| 8 | \$25.00 | \$11.06 | \$13.94 | \$1092.29 |
| 9 | \$25.00 | \$10.92 | \$14.08 | \$1078.21 |
| 10 | \$25.00 | \$10.78 | \$14.22 | \$1063.99 |
| 11 | \$25.00 | \$10.64 | \$14.36 | \$1049.63 |
| 12 | \$25.00 | \$10.50 | \$14.50 | \$1035.13 |
| 13 | \$25.00 | \$10.35 | \$14.65 | \$1020.48 |
| 14 | \$25.00 | \$10.20 | \$14.80 | \$1005.68 |
| 15 | \$25.00 | \$10.06 | \$14.94 | \$990.74 |
| 16 | \$25.00 | \$9.91 | \$15.09 | \$975.65 |
| 17 | \$25.00 | \$9.76 | \$15.24 | \$960.40 |
| 18 | \$25.00 | \$9.60 | \$15.40 | \$945.01 |
| 19 | \$25.00 | \$9.45 | \$15.55 | \$929.46 |
| 20 | \$25.00 | \$9.29 | \$15.71 | \$913.75 |
| 21 | \$25.00 | \$9.14 | \$15.86 | \$897.89 |
| 22 | \$25.00 | \$8.98 | \$16.02 | \$881.87 |
| 23 | \$25.00 | \$8.82 | \$16.18 | \$865.69 |
| 24 | \$25.00 | \$8.66 | \$16.34 | \$849.34 |

| | | | | |
|----|---------|--------|---------|----------|
| 25 | \$25.00 | \$8.49 | \$16.51 | \$832.84 |
| 26 | \$25.00 | \$8.33 | \$16.67 | \$816.17 |
| 27 | \$25.00 | \$8.16 | \$16.84 | \$799.33 |
| 28 | \$25.00 | \$7.99 | \$17.01 | \$782.32 |
| 29 | \$25.00 | \$7.82 | \$17.18 | \$765.14 |
| 30 | \$25.00 | \$7.65 | \$17.35 | \$747.80 |
| 31 | \$25.00 | \$7.48 | \$17.52 | \$730.27 |
| 32 | \$25.00 | \$7.30 | \$17.70 | \$712.58 |
| 33 | \$25.00 | \$7.13 | \$17.87 | \$694.70 |
| 34 | \$25.00 | \$6.95 | \$18.05 | \$676.65 |
| 35 | \$25.00 | \$6.77 | \$18.23 | \$658.42 |
| 36 | \$25.00 | \$6.58 | \$18.42 | \$640.00 |
| 37 | \$25.00 | \$6.40 | \$18.60 | \$621.40 |
| 38 | \$25.00 | \$6.21 | \$18.79 | \$602.61 |
| 39 | \$25.00 | \$6.03 | \$18.97 | \$583.64 |
| 40 | \$25.00 | \$5.84 | \$19.16 | \$564.48 |
| 41 | \$25.00 | \$5.64 | \$19.36 | \$545.12 |
| 42 | \$25.00 | \$5.45 | \$19.55 | \$525.57 |
| 43 | \$25.00 | \$5.26 | \$19.74 | \$505.83 |
| 44 | \$25.00 | \$5.06 | \$19.94 | \$485.89 |
| 45 | \$25.00 | \$4.86 | \$20.14 | \$465.75 |
| 46 | \$25.00 | \$4.66 | \$20.34 | \$445.40 |
| 47 | \$25.00 | \$4.45 | \$20.55 | \$424.86 |
| 48 | \$25.00 | \$4.25 | \$20.75 | \$404.11 |
| 49 | \$25.00 | \$4.04 | \$20.96 | \$383.15 |
| 50 | \$25.00 | \$3.83 | \$21.17 | \$361.98 |
| 51 | \$25.00 | \$3.62 | \$21.38 | \$340.60 |
| 52 | \$25.00 | \$3.41 | \$21.59 | \$319.00 |
| 53 | \$25.00 | \$3.19 | \$21.81 | \$297.19 |

| | | | | |
|----|---------|--------|---------|----------|
| 54 | \$25.00 | \$2.97 | \$22.03 | \$275.17 |
| 55 | \$25.00 | \$2.75 | \$22.25 | \$252.92 |
| 56 | \$25.00 | \$2.53 | \$22.47 | \$230.45 |
| 57 | \$25.00 | \$2.30 | \$22.70 | \$207.75 |
| 58 | \$25.00 | \$2.08 | \$22.92 | \$184.83 |
| 59 | \$25.00 | \$1.85 | \$23.15 | \$161.68 |
| 60 | \$25.00 | \$1.62 | \$23.38 | \$138.29 |
| 61 | \$25.00 | \$1.38 | \$23.62 | \$114.68 |
| 62 | \$25.00 | \$1.15 | \$23.85 | \$90.82 |
| 63 | \$25.00 | \$0.91 | \$24.09 | \$66.73 |
| 64 | \$25.00 | \$0.67 | \$24.33 | \$42.40 |
| 65 | \$25.00 | \$0.42 | \$24.58 | \$17.82 |
| 66 | \$18.00 | \$0.18 | \$17.82 | \$0.00 |

How can you avoid paying for so long and paying so much interest?

IWBAT make a table that shows the effects of making payments and additional purchases on the balance and explore various scenarios to pay off a credit card to see which is most beneficial.

Credit: Tracking Payments & Purchases

Minimum payment plus new purchases

Month 1: New bed \$1300

APR: 18%

Month 4: Microwave \$45

Minimum payment:

Month 5: Stroller \$150

2% of previous balance

Month 6: Clothes \$250

Interest calculated:

Previous Balance

| End of month | Previous balance | New charges | Payment received | Finance charge | Principal paid | New balance |
|--------------|------------------|-------------|------------------|----------------|----------------|-------------|
| 1 | 0 | 1300 | 0 | 0 | 0 | 1300 |
| 2 | 1300 | 0 | 26 | 19.50 | 6.50 | 1293.50 |
| 3 | 1293.50 | 0 | 25.87 | 19.40 | 6.47 | 1287.03 |
| 4 | 1287.03 | 45 | 25.74 | 19.31 | 6.43 | 1325.60 |
| 5 | 1325.60 | 150 | 26.51 | 19.88 | 6.63 | 1468.97 |
| 6 | 1468.97 | 250 | 29.38 | 22.03 | 7.34 | 1711.63 |
| 7 | 1711.63 | 0 | 34.23 | 25.67 | 8.56 | 1703.07 |

IWBAT make a table that shows the effects of making payments and additional purchases on the balance and explore various scenarios to pay off a credit card to see which is most beneficial.

Credit: Tracking Payments & Purchases

Same scenario, but payments raised to \$200.

| End of month | Previous balance | New charges | Payment received | Finance charge | Principal paid | New balance |
|--------------|------------------|-------------|------------------|----------------|----------------|-------------|
| 1 | 0 | 1300 | 0 | 0 | 0 | 1300 |
| 2 | 1300 | 0 | 200 | 19.50 | 180.50 | 1119.50 |
| 3 | 1119.50 | 0 | 200 | 16.79 | 183.30 | 936.20 |
| 4 | 936.20 | 45 | 200 | 14.03 | 185.97 | 795.23 |
| 5 | 795.23 | 150 | 200 | 11.93 | 188.07 | 757.16 |
| 6 | 757.16 | 250 | 200 | 11.35 | 188.64 | 818.52 |
| 7 | 818.52 | 0 | 200 | 12.28 | 187.72 | 630.80 |

Same scenario, but previous balance paid off monthly.

| End of month | Previous balance | New charges | Payment received | Finance charge | Principal paid | New balance |
|--------------|------------------|-------------|------------------|----------------|----------------|-------------|
| 1 | 0 | 1300 | 1300 | 0 | 1300 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 0 | 45 | 45 | 0 | 45 | 0 |
| 5 | 0 | 150 | 150 | 0 | 150 | 0 |
| 6 | 0 | 250 | 250 | 0 | 250 | 0 |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 |

IWBAT make a table that shows the effects of making payments and additional purchases on the balance and explore various scenarios to pay off a credit card to see which is most beneficial.

Credit: Tracking Payments & Purchases

Credit Card Accountability, Responsibility, and Disclosure Act of 2009

- Card companies must give cardholders 45 days' notice of any interest rate increases.
- Creditors must print an explanation on their statements showing how long it would take to pay the total balance due and how much interest would be paid if the debtor only makes the minimum monthly payment.

Payment Due Date
04/01/2010

APR = 17%

Minimum payment =
2% of balance or \$15,
whichever is larger

New Balance \$ 9999.00

Minimum Amount Due \$ 199.98

Late Payment Warning: If we do not receive your Minimum Amount Due by the Payment Due Date listed above, you will have to pay a late fee of up to \$39.

Minimum Payment Warning: If you make only the minimum payment each period, you will pay more in interest and it will take you longer to pay off your balance. For example:

| If you make no additional charges and each month you pay . . . | You will pay off the balance shown on this statement in about . . . | And you will pay an estimated total of . . . |
|--|---|--|
| Only the minimum amount due | 28.33 years | \$23,605.35 |
| \$300 | 3.83 years | \$13,627.83 (savings = \$9977.52) |

If you would like information about credit counseling services, call 1-866-391-5446.

Credit card companies are now required to give information on each statement concerning minimum payments.

IWBAT make a table that shows the effects of making payments and additional purchases on the balance and explore various scenarios to pay off a credit card to see which is most beneficial.

Credit: Comparing Credit Cards

Calculate how much you will end up paying if you only make minimum payments.

You owe \$1343 on your credit card. Minimum payment is 2% of the balance. The APR is 16% compounded via the average daily balance method. You can afford to pay up to \$50 per month toward the card.

If you only make the minimum payment each month, how long will it take you to pay off the balance and how much will you have paid when the balance is \$0?

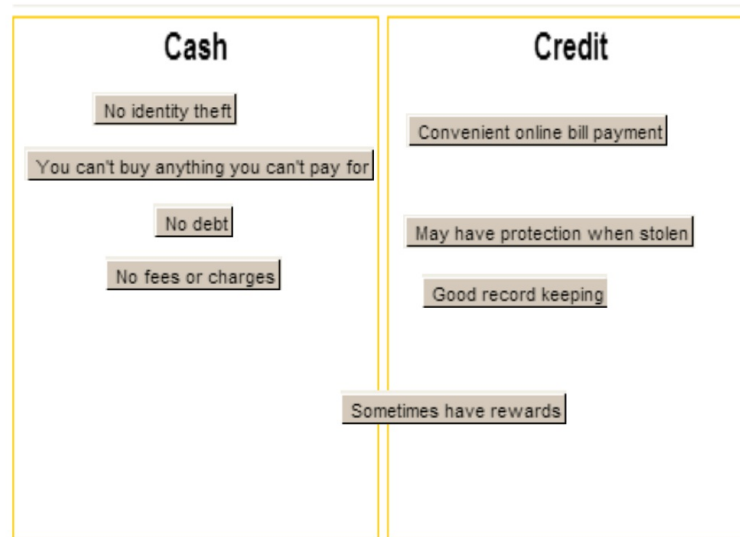
171 mo \$1680.40

If you pay the maximum you can afford each month, how much time and money will you save?

137mo ~\$1340

Credit: Comparing Credit Cards

Compare the advantages and disadvantages of using cash instead of a credit card.



Credit: Comparing Credit Cards

IWBAT compare cards with an annual fee and a lower APR to ones with no fee and a higher APR or an introductory APR and explore common perks offered by credit card companies.

I will capture my thinking using the math note catcher including teacher and student-team modeled example problems on the Promethean board. I will demonstrate my understanding on my exit ticket.

Credit: Comparing Credit Cards

Credit card features/enticements



IWBAT compare cards with an annual fee and a lower APR to ones with no fee and a higher APR or an introductory APR and explore common perks offered by credit card companies.

Credit: Comparing Credit Cards

APR

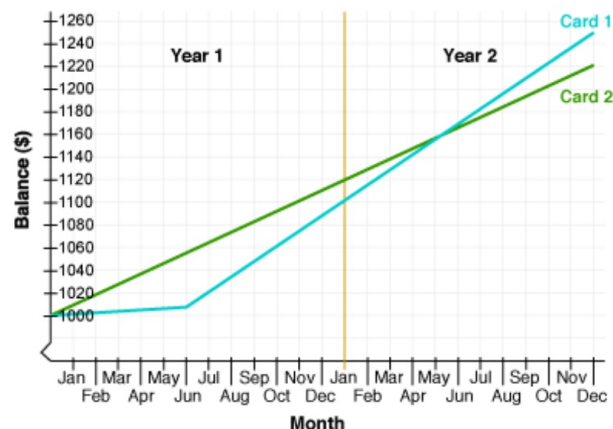
introductory APR -

The initial lower interest rate on your credit card

standard APR -

the interest rate you will be paying after your introductory period ends

The graph illustrates the difference between card 2, which has a 9.9% APR, and card 1, which had an introductory APR of 1.9%, but now has a rate of 14.24%.



IWBAT compare cards with an annual fee and a lower APR to ones with no fee and a higher APR or an introductory APR and explore common perks offered by credit card companies.

Credit: Comparing Credit Cards

Perks

balance transfer

miles

Cash back

Discount

Student Cards

If you are a college student, you are eligible for a student card from almost any bank. The major advantage of a student card is that it requires no credit history. Many banks offer other perks, including:

- points for high GPA;
- 0% APR for the first 6 to 12 months;
- no annual fee;
- points earned from purchases that can be redeemed at select restaurants or stores;
- discounts on purchases made through select retailers.

IWBAT compare cards with an annual fee and a lower APR to ones with no fee and a higher APR or an introductory APR and explore common perks offered by credit card companies.

Credit: Comparing Credit Cards

Annual fee

Suppose you want to compare two cards. Card 1 has an APR of 6.9% and an annual fee of \$35, while card 2 has a standard APR of 9.9% and no annual fee.

Which card is better? $fv = P * APR + \text{fee}$

$$FV_1 = \$2000(0.069) + 35 = \$173 \quad \text{better by } \$25$$

$$FV_2 = \$2000(0.099) + 0 = \$198$$

IWBAT compare cards with an annual fee and a lower APR to ones with no fee and a higher APR or an introductory APR and explore common perks offered by credit card companies.

Discuss with a partner the advantages and disadvantages of using cash or a credit card.

Please use language such as this to support your claims:

- With ____ you can ____, but ____.
- One advantage of ____ is ____, because ____.
- One disadvantage of ____ is ____, because ____.

You will be responsible for telling the class one thing your partner said to you.

3 min to discuss

IWBAT learn the factors which are used to compute a credit score, learn which factors damage a credit score, and understand how to improve a credit score.

I will do this via capturing notes in Cornell notes format, whole class discussions to introduce and clarify key concepts, and completing practice problems collaboratively with teacher support.

Credit: Credit Scores

The three Cs of credit

Capacity *How much you can afford to spend*

Character *The way you spend money (or don't) which affects how likely you are to pay your bills*

Collateral *Something of value that can be sold for \$ that is used to secure a loan*

IWBAT learn the factors which are used to compute a credit score, learn which factors damage a credit score, and understand how to improve a credit score.

Credit: Credit Scores

The three Cs of credit

| | | |
|------------|--|---|
| Capacity | <div>More Likely To Say Yes If Your Friend ...</div> | <div>More Likely To Say No If Your Friend ...</div> |
| Character | <div>More Likely To Say Yes If Your Friend ...</div> | <div>More Likely To Say No If Your Friend ...</div> |
| Collateral | <div>More Likely To Say Yes If Your Friend ...</div> | <div>More Likely To Say No If Your Friend ...</div> |

Credit: Bankruptcy

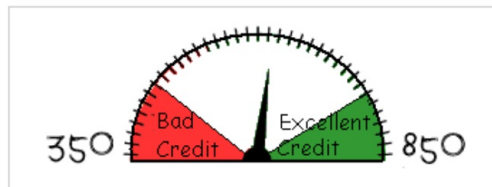
What is the best rationale for paying off credit cards?

- **Lowest balance first**
- **Highest balance first**
- **Highest interest first**
- **Some other reason**

Justify your reasoning.

4 corners

Credit: Credit Scores



FICO is a company founded in 1956 that evaluates credit risk. A credit score provided by FICO is the *most used score in the world*, so people often refer to a credit score as a FICO score. (There are, however, several companies that evaluate credit scores.)

The FICO method of calculating credit scores involves five different factors. Below is a rough sketch of how each factor could play into a person's credit score. Note: FICO's actual algorithms are not public information, so the table below is hypothetical.

| Factor | Percentage that it affects score |
|--------------------------|----------------------------------|
| Payment history | 35% |
| Amount owed | 30% |
| Length of credit history | 15% |
| New credit | 10% |
| Types of credit | 10% |

IWBAT learn the factors which are used to compute a credit score, learn which factors damage a credit score, and understand how to improve a credit score.

Credit: Credit Scores

What damages credit scores?

| Credit event | FICO score damage to a starting score of 780 |
|---|--|
| Apply for a store credit card | -10 points |
| Take on a new \$30,000 car loan | -15 points |
| Take on a new mortgage loan of \$350,000 | -15 points |
| Miss a payment on one account that wasn't already late | -45 to -75 points |
| Miss the payment on all of your accounts one month | -60 to -110 points |
| Max out all of your credit cards (utilization percentage is now 100%) | -50 to -100 points |
| File for bankruptcy | -195 to -255 points |

IWBAT learn the factors which are used to compute a credit score, learn which factors damage a credit score, and understand how to improve a credit score.

Credit: Credit Scores

How Credit Scores Improve

- **Make all your payments on time.** This means you should never be late paying off mortgages, student loans, or credit cards.
- **Open accounts, take loans, and use credit cards** — *if you can do so responsibly*. Credit scores are based on your history of financial stability and repaying your loans. The more history there is, the better your score.
- **Avoid maxing out credit cards**, even if you are able to pay off the debt.
- **Do not apply for too many credit cards or loans at the same time.**

IWBAT learn the factors which are used to compute a credit score, learn which factors damage a credit score, and understand how to improve a credit score.

Credit: Credit Scores

Extremely influential

Payment history: Make sure you pay all bills on time.

Highly influential

Age and type of credit

It's helpful to maintain a mix of accounts (credit cards, auto, mortgage) over time to improve your score

% of credit limit used

Focus on keeping revolving balances low, under 30% of credit limits

Moderately influential

Total balances/debt

Best to reduce the amount of debt you owe

Less influential

Recent credit behavior and inquiries

Don't open too many new accounts too quickly

Available credit

Only open the amount of credit you need

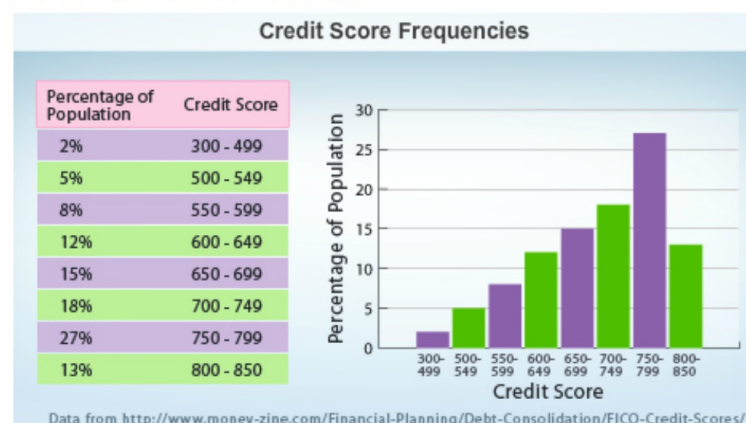
There are several things that don't factor into ... [a] credit scoring model ... — including race, religion, nationality, gender, marital status, age, salary, occupation, employer, employment history, where you live or your total assets.

IWBAT learn the factors which are used to compute a credit score, learn which factors damage a credit score, and understand how to improve a credit score.

<https://www.credit-scores/vantagescore/>

Credit: Credit Scores

A **credit rating** is an estimate of a person's ability to pay off debts. How many people really have excellent credit or terrible credit?



If your FICO credit score is

750 - 850
660 - 749
620 - 659
350 - 619

Your credit rating is considered to be

Excellent
Good
Fair
Poor

IWBAT learn the factors which are used to compute a credit score, learn which factors damage a credit score, and understand how to improve a credit score.

Credit: Credit Scores

Why are credit scores important?



IWBAT understand how to improve your credit score and use a hypothetical credit score table to calculate a credit score.

Credit: Credit Scores

Mortgage rate example

| FICO score | Interest rate | Monthly payment |
|------------|---------------|-----------------|
| 720 – 850 | 5.59% | \$860 |
| 700 – 719 | 5.71% | \$872 |
| 675 – 699 | 6.25% | \$924 |
| 620 – 674 | 7.40% | \$1039 |
| 560 – 619 | 8.53% | \$1157 |
| 500 – 559 | 9.29% | \$1238 |

IWBAT learn the factors which are used to compute a credit score, learn which factors damage a credit score, and understand how to improve a credit score.

Credit: Credit Scores

Is FICO the only game in town?

VantageScore is a credit scoring model that first emerged in 2006 as a joint venture of the big three credit bureaus — Experian, Equifax and TransUnion — and now has the distinction of being one of only two scoring models lenders rely on to make lending decisions (the other being FICO). VantageScore currently claims about 10% of this hard-to-crack market for credit scores used in the lending industry, with the greatest adoption seen among the largest banks and lenders. (8 billion credit account applications in 2016) Many mortgage lenders remain with FICO because Fannie Mae and Freddie Mac, the government-related mortgage companies, remain with FICO.

<http://www.freep.com/story/money/personalfinance/2017/04/22/major-changes-coming-how-your-credit-score-calculated/100653342/>
<https://www.credit.com/credit-scores/vantagescore/>

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Credit: Credit Scores

VantageScore cont'd

... its ability to calculate a score for 30 to 35 million previously “un-scoreable,” or “thin file,” consumers. While many other scoring models require at least six months of credit history and recent credit report updates, this model only requires one month of credit history and less frequent updates. This makes it possible for those consumers to have easier access to credit.

Other notable changes include:

- Ignoring all paid collections, as well as any collections, paid or unpaid, under \$250
- Credit relief for disaster victims by ignoring accounts negatively impacted by natural disasters.
- Credit scores will take into account the trajectory of a borrower's debts on a month-to-month basis
- VantageScore will now mark a borrower negatively for having excessively large credit card limits, on the theory that the person could run up a high credit card debt quickly
- Taking civil judgments, medical debts and tax liens out of the equation comes after a 2015 agreement between the three credit bureaus and 31 state attorneys general

<http://www.freep.com/story/money/personalfinance/2017/04/22/major-changes-coming-how-your-credit-score-calculated/100653342/>
<https://www.credit.com/credit-scores/vantagescore/>

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Credit: Credit Scores



<https://www.annualcreditreport.com/>

Free Credit Scores

Credit Karma Experian
Credit.com Discover
Nerd Wallet

Free Credit Apps

Equifax Mobile Credit Karma
Experian - Free Credit Report
Nerd Wallet - Free Credit Score
Capital One Credit Wise

IWBAT learn the factors which are used to compute a credit score, learn which factors damage a credit score, and understand how to improve a credit score.

Credit: Bankruptcy

05/02/17

IWBAT define personal and business bankruptcy, understand how bankruptcy works, and see how bankruptcy affects your credit score.

I will do this via capturing notes in Cornell notes format, whole class discussions to introduce and clarify key concepts, and completing practice problems collaboratively with teacher support.

Credit: Bankruptcy

What is bankruptcy?

CHAPTER 7

Play

is sometimes called "straight" bankruptcy or liquidation. In this case, all of the nonessential assets an individual owns are sold to immediately pay off debt to the creditors. Chapter 7 is available only to individuals.

CHAPTER 13

Play

is available to individuals or business owners and involves a more complicated pay-off plan. Businesses are turned over to a trustee, who will reorganize the company's assets and oversee debt repayment. Individuals must reorganize their debts as well and make payments over a certain period of time.

CHAPTER 11

Play

is available to all businesses but is usually used by corporations (multiowner businesses). It effectively puts a stay on creditors while allowing the company to reorganize. It is possible that the company will continue running or be sold while it is bankrupt and does not necessarily mean the company will go out of business.

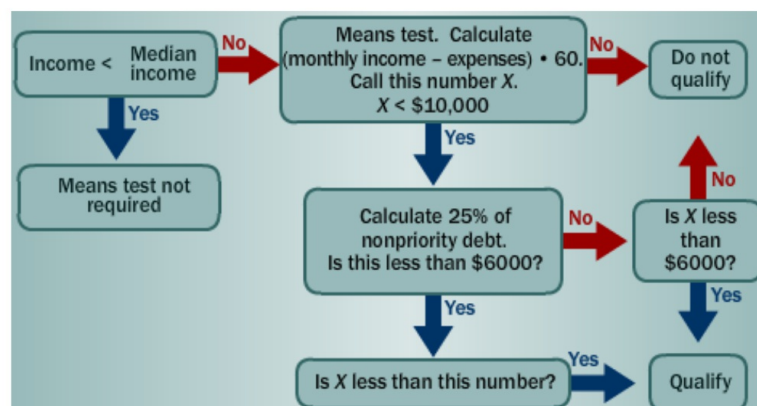
IWBAT understand how bankruptcy works and see how bankruptcy affects your credit score.

Credit: Bankruptcy

Chapter 7 means test

To prevent bankruptcy *fraud*, the government has established a means test for Chapter 7 filers. This prevents people from filing if they could actually pay off their debts. The means test does not apply to anyone who makes less than the median income in his or her home state.

Colorado
(2013)
\$58,823
source: AP



IWBAT understand how bankruptcy works and see how bankruptcy affects your credit score.

Credit: Bankruptcy

Chapter 7 cont'd

- Potential filers for bankruptcy *must* receive credit counseling from a federally approved agency.
- Correct forms *must* be filled out.
- State courts determine the specific terms of the bankruptcy including
- Assets are liquidated.

IWBAT understand how bankruptcy works and see how bankruptcy affects your credit score.

Credit: Bankruptcy

Chapters 11 & 13

- Chapters 11 and 13 require that a trustee be appointed to oversee reorganization of individual or company assets.
- They also require that a debt repayment plan for a certain time period (usually 3 – 5 years) be drawn out and put into place.

Under these chapters, it is possible for a business declaring bankruptcy to stay open.

IWBAT understand how bankruptcy works and see how bankruptcy affects your credit score.

Credit: Bankruptcy

Discharging debt
pay off your debt

| Debt not forgiven | |
|-------------------|---|
| Chapter 7 | <ul style="list-style-type: none"> • Alimony • Child support • Most recent back taxes • Student loans • Purchases of luxury goods or services costing more than \$550 that were bought within 90 days of filing • Cash advances totaling more than \$825 that were made within 70 days of filing • Fines or penalties to government agencies relating to tax or to an event or transaction that occurred 3 years before the filing • Debts obtained through false pretenses, false statements, or fraud |
| Chapter 13 | Same as Chapter 7 |
| Chapter 11 | <ul style="list-style-type: none"> • Most recent back taxes • Cash advances totaling more than \$825 that were made within 70 days of filing • Fines or penalties to government agencies relating to tax or to an event or transaction that occurred 3 years before the filing • Debts obtained through false pretenses, false statements, or fraud |

IWBAT understand how bankruptcy works and see how bankruptcy affects your credit score.

Credit: Bankruptcy

Bankruptcy and your credit report

| | Chapter 7 | Chapter 13 | Chapter 11 |
|--|-------------|----------------|--------------|
| Years until removed from credit report | 10 years | Up to 10 years | Never |
| Time to pay off debt | Immediately | 3 – 5 years | Indefinitely |

People who have gone bankrupt find it very difficult to get new loans or credit cards for quite a while.

IWBAT understand how bankruptcy works and see how bankruptcy affects your credit score.

Credit: Bankruptcy

Bankruptcy article jigsaw

- Intro (whole class)
- Definition (wc)
- Examples (jigsaw per table)
- Conclusion (wc)

IWBAT understand how bankruptcy works and see how bankruptcy affects your credit score.

Credit: Bankruptcy

Credit Overload Rule

The credit overload rule is that no more than 20% of take-home pay should go toward paying off credit cards and loans. You can calculate this as a ratio.

$$\frac{\text{Monthly payment on loans and credit cards}}{\text{Monthly take-home pay}}$$

If this number is less than 0.2 (the decimal equivalent of 20%), then you are not in danger of credit overload.

If it is larger, then it is time to reorganize your budget.

A mortgage (a loan on a house) is the only type of debt that is an *exception* to the credit overload rule of thumb. In general, it is fine to pay 25%, or about a week's pay, of your income toward a mortgage (or toward rent).

So, you may subtract mortgage or rent from total loans and apply the credit overload rule to the remaining debt.

IWBAT understand how bankruptcy works and see how bankruptcy affects your credit score.

Credit: Bankruptcy

Unit Test 5/5/17

Due Friday, 5/5/17

- Credit unit vocabulary
- Credit unit VGOs
- Credit Unit Practice Problems

IWBAT understand how bankruptcy works and see how bankruptcy affects your credit score.